

Amendments to the Claims

Please amend the claims as follows:

1 – 2. (Cancelled)

3. (Previously Presented) The immunogenic composition of claim 120 wherein said immunogenic composition is a subunit composition.

4. (Previously Presented) The immunogenic composition of claim 3 wherein the at least one Neisserial autotransporter antigen comprises the passenger domain of Hsf, the at least one Neisserial Fe acquisition protein antigen is selected from the group consisting of TbpB high, TbpB low, and LbpB, Lipo28, and NMB0964, and the at least one different antigen is selected from: FhaB, NspA, passenger domain of Hap, surface exposed domain of OMP85, FrpA, FrpC, PldA, PilC, Lipo28, LPS immunotype L2, and LPS immunotype L3.

5. (Previously Presented) The immunogenic composition of claim 120 comprising an outer membrane vesicle preparation, wherein the antigens have been upregulated in the outer membrane vesicle.

6. (Currently amended) The immunogenic composition of claim 5 wherein the at least one Neisserial autotransporter antigen is Hsf, the at least one Neisserial Fe acquisition protein antigen is selected from the group consisting of HpuA, HpuB, TbpA (high), TbpA (low), LbpA, LbpB, Lipo 28, NMB0964, and the at least one different antigen is selected from: NadA, NspA, Hap, OMP85, TspA, TspB, FhaC, TbpB, PilQ, NM-ADPRT, P2086, TdfH, PorB, MafA, MafB, HimD, HisD, GNA1870, OstA, HlpA, MltA, PldA, LPS immunotype L2, and LPS immunotype L3.

7. (Previously Presented) The immunogenic composition of claim 120 comprising a subunit composition having one or more of the antigens, and an outer membrane vesicle preparation having at least one antigen which has been upregulated in the outer membrane vesicle.

8. (Cancelled)

9. (Previously Presented) The immunogenic composition of claim 5 comprising at least two different outer membrane vesicle preparations.

10. (Original) The immunogenic composition of claim 9 wherein one outer membrane vesicle preparation is immunotype L2 and one outer membrane vesicle preparation is immunotype L3.

11 – 19. (Canceled)

20. (Currently amended) The immunogenic composition of claim 120 wherein the at least one Neisserial autotransporter antigen is selected from the group consisting of Hsf, Hap, IgA protease, AspA and NadA;
the at least one Neisserial Fe acquisition protein is selected from TbpA (high) Lipo28, and NMB0964; and
at least one different antigen is selected from the group consisting of: FhaB, PilC, MafA, MafB, Omp26, NMB0995, FhaC, NMB 1124, NMB 1162, NMB 1220, NMB 1313, NMB 1953, HtrA, ~~FrpA, FrpC, FrpA/C, OMP85, PldA, LbpA, TbpA(low), PilQ, MltA, HimD, HisD, GNA1870, OstA, HlpA, NspA, TspA, TspB, NMB0315, NMB1119, TdfH, PerB, NM-ADPRT, VapD, LPS immunotype L2, and LPS immunotype L3.~~

21. (Cancelled)

22. (Currently amended) The immunogenic composition of claim 123 wherein the at least one Neisserial autotransporter antigen is selected from the group consisting of Hsf, Hap, IgA protease, AspA and NadA;
the at least one Neisserial membrane associate protein is OMP85 or GNA1870; and
the at least one different antigen is selected from the group consisting of: FhaB, PilC, MafA, MafB, Omp26, NMB0995, FbpA, Bcp, LpbB, ~~FrpA, FrpC, FrpA/C, LbpA, TbpA(low), TbpA(high), TbpB(low), TbpB(high), HpuA, HpuB, MltA, HisD, P2086, Lipo28, Sibp, NMB0964, NMB0293, NMB0315, NMB1119, NM-ADPRT, VapD, LPS immunotype L2, and LPS immunotype L3.~~

23 – 44. (Cancelled)

45. (Previously Presented) The immunogenic composition of claim 5 wherein a host cell from which the outer membrane vesicle preparation is derived has been engineered so as to down-regulate the expression of one or more of IgTB or IgTE.

46 – 49. (Cancelled)

50. (Previously Presented) The immunogenic composition of claim 5 wherein the outer membrane vesicle preparation contains LPS which is conjugated to an outer membrane protein (OMP).

51. (Previously Presented) The immunogenic composition of claim 50 wherein LPS is conjugated to OMP in situ in the outer membrane vesicle preparation.

52. (Previously Presented) The immunogenic composition of claim 120 comprising an antigen derived from *Neisseria meningitidis*.

53. (Cancelled)

54. (Previously Presented) The immunogenic composition of claim 120 wherein all neisserial antigens are derived from *N.meningitidis*.

55. (Previously Presented) The immunogenic composition of claim 120 further comprising one or more bacterial capsular polysaccharides or oligosaccharides.

56. (Original) The immunogenic composition of claim 55 wherein the capsular polysaccharides or oligosaccharides are derived from bacteria selected from the group consisting of: *Neisseria meningitidis* serogroup A, C, Y and W-135, *Haemophilus influenzae* b, *Streptococcus pneumoniae*, Group A Streptococci, Group B Streptococci, *Staphylococcus aureus* and *Staphylococcus epidermidis*.

57. (Previously Presented) The immunogenic composition of claim 55 wherein the capsular polysaccharide or oligosaccharide is conjugated to a protein.

58. (Previously Presented) The immunogenic composition of claim 120 comprising an adjuvant.

59. (Previously Presented) The immunogenic composition of claim 58 comprising aluminium salts.

60. (Previously Presented) The immunogenic composition of claim 58 comprising 3D-MPL.

61 – 81. (Cancelled)

82. (Previously Presented) The immunogenic composition of claim 5, comprising a meningococcal bleb of immunotype L2 and a meningococcal bleb of immunotype L3.

83. (Original) The immunogenic composition of claim 82 wherein TbpA(high) is upregulated in one of the blebs.

84. (Cancelled)

85. (Previously Presented) The immunogenic composition of claim 82 wherein Hsf is upregulated in one of the blebs.

86. (Cancelled).

87. (Previously Presented) The immunogenic composition of claim 82 wherein the blebs are isolated from meningococcal strains incapable of making capsular polysaccharide.

88. (Previously Presented) The immunogenic composition of claim 82 wherein the L2 and/or L3 LPS oligosaccharide structures are truncated consistent with the blebs having been isolated from meningococcal strains that are IgT^B.

89. (Canceled)

90. (Previously Presented) The immunogenic composition of claim 82 wherein the L2 and/or L3 LPS oligosaccharide moieties are intra-bleb conjugated to outer-membrane proteins integral to the bleb.

91 – 95. (Cancelled)

96. (Previously Presented) The immunogenic composition of claim 20 wherein at least one Neisserial autotransporter antigen is Hsf.

97. (Cancelled)

98. (Previously Presented) The immunogenic composition of claim 22 wherein at least one Neisserial autotransporter antigen is Hsf.

99 – 113. (Cancelled)

114. (Previously Presented) The immunogenic composition of Claim 5 wherein the antigens have been upregulated in the outer membrane vesicle by growth of a parental strain of Neisseria under iron limitation conditions.

115. (Previously Presented) The immunogenic composition of Claim 7 wherein the at least one antigen upregulated in the outer membrane vesicle has been upregulated by growth of a parental strain of Neisseria under iron limitation conditions.

116. (Cancelled)

117. (Currently amended) An immunogenic composition comprising at least one Neisserial autotransporter antigen, at least one Neisserial adhesin antigen, and at least one different antigen wherein the at least one Neisserial autotransporter antigen is selected from the group consisting of Hsf, Hap, IgA protease, AspA and NadA; the at least one Neisserial adhesin antigen is selected from the group consisting of FhaB, NspA, PilC, Hsf, Hap, MafA, MafB, Omp26, NMB0315, NMB0995, NMB1119 and NadA; and the at least one different antigen is selected from the group consisting of:

- a) Neisserial toxins ~~FrpA~~, ~~FrpC~~, ~~FrpA/C~~, VapD, NM-ADPRT, lipopolysaccharide (LPS) immunotype L2, and LPS immunotype L3;
- b) Neisserial Fe acquisition proteins ~~TbpA high~~, ~~TbpA low~~, ~~TbpB high~~, ~~TbpB low~~, ~~LbpA~~, ~~LbpB~~; P2086, HpuA, HpuB, Lipo28, Sibp, FbpA, BfrA, BfrB, Bcp, NMB0964 and NMB0293; and
- c) Neisserial membrane associated proteins ~~PilQ~~, ~~OMP85~~, FhaC, ~~NspA~~, ~~TbpA(high)~~, ~~TbpA(low)~~, ~~LbpA~~, HpuB, TspA, TspB, TdfH, PorB, HimD, HisD, GNA1870, OstA, HlpA, ~~MitA~~, NMB 1124, NMB 1162, NMB 1220, NMB 1313, NMB 1953, and HtrA and ~~PldA~~.

118. (Previously Presented) The immunogenic composition of claim 117, wherein each of the at least one Neisserial autotransporter antigen, the at least one Neisserial adhesin antigen, and the at least one different antigen are isolated.

119. (Cancelled)

120. (Currently amended) An immunogenic composition comprising at least one Neisserial autotransporter antigen, at least one Neisserial Fe acquisition protein antigen, and at least one different antigen, wherein the at least one Neisserial autotransporter antigen is selected from the group consisting of Hsf, Hap, IgA protease, AspA and NadA; the at least one Neisserial Fe acquisition protein antigen selected from the group consisting of TbpA high, TbpA low, TbpB high, TbpB low, LbpA, LbpB, P2086, HpuA, HpuB, Lipo28, Sibp, FbpA, BfrA, BfrB, Bcp, NMB0964 and NMB0293; and the at least one different antigen is selected from the group consisting of:

- a) Neisserial toxins ~~FrpA~~, ~~FrpC~~, ~~FrpA/C~~, VapD, NM-ADPRT, lipopolysaccharide (LPS) immunotype L2, and LPS immunotype L3;
- b) Neisserial adhesins selected ~~FhaB~~, ~~NspA~~, ~~PilC~~, ~~Hsf~~, ~~Hap~~, MafA, MafB, Omp26, NMB0315, NMB0995, NMB1119 and NadA; and

c) Neisserial membrane associated proteins-selected ~~PilQ~~, ~~OMP85~~, ~~FhaC~~, ~~NspA~~, ~~TbpA(high)~~, ~~TbpA(low)~~, ~~LbpA~~, ~~HpuB~~, ~~TspA~~, ~~TspB~~, ~~TdfH~~, ~~PorB~~, ~~HimD~~, ~~HisD~~, ~~GNA1870~~, ~~OstA~~, ~~HlpA~~, ~~MitA~~, ~~NMB 1124~~, ~~NMB 1162~~, ~~NMB 1220~~, ~~NMB 1313~~, ~~NMB 1953~~, and HtrA and PldA.

121. (Currently amended) The immunogenic immuogenic composition of claim 120, wherein each of the at least one Neisserial autotransporter antigen, the at least one Neisserial adhesin antigen, and the at least one different antigen are isolated.

122. (Cancelled)

123. (Currently amended) An immunogenic composition comprising at least one Neisserial autotransporter antigen, at least one Neisserial membrane associated protein, and at least one different antigen, wherein the at least one Neisserial autotransporter antigen is selected from the group consisting of ~~Hsf~~, ~~Hap~~, ~~IgA protease~~, ~~AspA~~ and ~~NadA~~ and ~~NMB0293~~; the at least one Neisserial membrane associated protein-selected from the group consisting of ~~PilQ~~, ~~OMP85~~, ~~FhaC~~, ~~NspA~~, ~~TbpA(high)~~, ~~TbpA(low)~~, ~~LbpA~~, ~~HpuB~~, ~~TspA~~, ~~TspB~~, ~~TdfH~~, ~~PorB~~, ~~HimD~~, ~~HisD~~, ~~GNA1870~~, ~~OstA~~, ~~HlpA~~, ~~MitA~~, ~~NMB 1124~~, ~~NMB 1162~~, ~~NMB 1220~~, ~~NMB 1313~~, ~~NMB 1953~~, ~~HtrA~~ and ~~PldA~~, and the at least one different antigen is selected from the group consisting of:

a) Neisserial toxins ~~FrpA~~, ~~FrpC~~, ~~FrpA/C~~, ~~VapD~~, ~~NM-ADPRT~~, lipopolysaccharide (LPS) immunotype L2, and LPS immunotype L3;

b) Neisserial adhesins ~~FhaB~~, ~~NspA~~, ~~PilC~~, ~~Hsf~~, ~~Hap~~, ~~MafA~~, ~~MafB~~, ~~Omp26~~, ~~NMB0315~~, ~~NMB0995~~, ~~NMB1119~~ and ~~NadA~~; and

c) Neisserial Fe acquisition proteins antigen selected from the group consisting of ~~TbpA-high~~, ~~TbpA-low~~, ~~TbpB-high~~, ~~TbpB-low~~, ~~LbpA~~, ~~LbpB~~, ~~P2086~~, ~~HpuA~~, ~~HpuB~~, ~~Lipo28~~, ~~Sibp~~, ~~FbpA~~, ~~BfrA~~, ~~BfrB~~, ~~Bcp~~, ~~NMB0964~~.

124. (Previously Presented) The immuogenic composition of claim 123, wherein each of the at least one Neisserial autotransporter antigen, the at least one Neisserial adhesin antigen, and the at least one different antigen are isolated.

125. (Previously Presented) The immunogenic composition of claim 117 wherein the at least one Neisserial autotransporter antigen is Hsf and the at least one Neisserial adhesin antigen is Hap.

126. (Previously Presented) The immunogenic composition of claim 117 further comprising an adjuvant.

127. (Cancelled)

128. (Previously Presented) The immunogenic composition of claim 117, wherein said immunogenic composition is a subunit composition.

129. (Previously Presented) The immunogenic composition of claim 123 wherein the at least one Neisserial autotransporter antigen is Hsf and the at least one Neisserial membrane-associated protein is OMP85 or GNA1870.

130. (Previously Presented) The immunogenic composition of claim 123 further comprising an adjuvant.

131. (Cancelled)

132. (Previously Presented) The immunogenic composition of claim 123, wherein said immunogenic composition is a subunit composition.

133. (Previously Presented) The immunogenic composition of claim 125, wherein said composition additional comprises the Neisserial Fe acquisition protein NMB0964.

134. (Previously Presented) The immunogenic composition of claim 125, wherein said composition additional comprises the Neisserial membrane associated protein GNA1870.

135. (Previously Presented) The immunogenic composition of claim 117, wherein said Neisserial autotransporter antigen is Hsf.

137. (Previously Presented) The immunogenic composition of claim 20 wherein said Neisserial autotransporter antigen is NadA.

137. (Previously Presented) The immunogenic composition of claim 20 wherein said Neisserial Fe acquisition protein is Lipo28.

138. (Previously Presented) The immunogenic composition of claim 20 wherein said at least one different antigen is GNA1870.

139. (Previously Presented) The immunogenic composition of claim 136 wherein said Neisserial Fe acquisition protein is Lipo28 and said at least one different antigen is GNA1870.

140. (Previously Presented) The immunogenic composition of claim 96 wherein said wherein said Neisserial Fe acquisition protein is NMB0964.

141. (Previously Presented) The immunogenic composition of claim 96 wherein said at least one different antigen is GNA1870.

142. (Previously Presented) The immunogenic composition of claim 140 wherein said at least one different antigen is GNA1870.